

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ALAN I. ALPERT
and
MICHAEL G. MALL

Appeal No. 95-4010
Application 08/082,338¹

ON BRIEF

Before KRASS, JERRY SMITH and FLEMING, **Administrative Patent Judges**.

¹ Application for patent filed June 24, 1993.

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FLEMING, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 2 through 18. Claim 1 has been canceled.

The invention relates to processing of instructions by a central processor within the computing system.

Independent claim 10 is reproduced as follows:

10. A method for pre-verifying an instruction operation code in a computer comprising a main storage and a central processing unit, said method comprising the steps of:

- a. storing a test operation instruction, said test operation instruction designating, by an operand, a corresponding target instruction having an operation code;
- b. said central processing unit executing said test operation instruction to test for operational presence within said central processing unit of a target instruction logic means capable of executing said target instruction;
- c. said central processing unit setting an exception indicator in a return value field in response to said testing; and

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- d. preventing initiation of the execution of said target instruction in response to said setting an exception indicator that is indicative of the absence of a target instruction logic means capable of executing said target instruction.

The Examiner relies on the following references:

Zolnowsky et al. (Zolnowsky)	4,710,866	Dec. 1, 1987
Tanagawa et al. (Tanagawa)	4,875,156	Oct. 17, 1989

Claims 2 through 18 stand rejected under 35 U.S.C.

§ 103 as being unpatentable over Zolnowsky and Tanagawa.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the briefs² and answers³ for the respective details thereof.

OPINION

We will not sustain the rejection of claims 2 through 18 under 35 U.S.C. § 103.

² Appellants filed an appeal brief on November 10, 1994. We will refer to this appeal brief as simply the brief. Appellants filed a reply appeal brief on March 20, 1995. We will refer to this reply appeal brief as the reply brief. The Examiner responded to the reply brief with an Examiner's answer mailed April 21, 1995, and thereby entered and considered the reply brief. Appellants filed a second reply appeal brief on May 12, 1995. We will refer to this reply appeal brief as the second reply brief. The Examiner stated in the Examiner's letter, mailed May 26, 1995, that the second reply brief has been entered and considered but no further response by the Examiner is deemed necessary.

³ The Examiner responded to the brief with an Examiner's answer, mailed February 27, 1995. We will refer to the Examiner's answer as simply the answer. The Examiner responded to the reply brief with a supplemental Examiner's answer, mailed April 21, 1995. We will refer to the supplemental Examiner's answer as simply the supplemental answer. The Examiner responded to the second reply brief with a letter, mailed May 26, 1995, so noting that the supplemental reply brief has been entered and considered. The Examiner offered no other response.

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The Examiner has failed to set forth a ***prima facie*** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. ***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." ***Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.***, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), ***cert. denied***, 117 S.Ct. 80 (1996) ***citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.***, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), ***cert. denied***, 469 U.S. 851 (1984).

Appellants argue on pages 6 through 29 of the brief that neither Zolnowsky nor Tanagawa teaches the claimed means or steps that correspond to the structure or steps as disclosed in Appellants' specification. For example, Appellants state on page 10 of the brief that claim 14 recites

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a "test operation instruction means" which corresponds to the Appellants' TSTOP

instruction 108 disclosed in Appellants' specification and an "instruction execute means" which corresponds to the Appellants'

instruction execution unit 110 disclosed in Appellants' specification. Appellants further state that claim 14 recites a "corresponding potentially undefined target instruction" which corresponds to instruction INST3 disclosed in Appellants' specification. Appellants' argue that these limitations are not taught by any combination of the applied references. In the reply brief and the second reply brief, Appellants emphasized that the Examiner fails to identify where in the prior art these limitations are taught.

The Examiner argues in the answer that Zolnowsky teaches the disclosed invention as substantially claimed. The Examiner takes claim 14 as an exemplary claim and argues that Zolnowsky teaches an instruction testing means in Figures 1-4; column 2, lines 54-64; column 3, lines 50-63; and columns 5, 6

and 8, and the response means in columns 6 and 8. The Examiner then states that Zolnowsky does not teach a means for preventing initiation of the execution of the undefined target instruction as claimed but argues it would have been obvious to one of ordinary skill in the art to adapt such a means into the Zolnowsky system in view of Tanagawa.

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the

Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." ***In re Fritch***, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), ***citing In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be an illogical

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and inappropriate process by which to determine patentability.

In re Denis Rouffet, 1998 U.S. App. LEXIS 16414 (Fed. Cir.
July 15, 1998).

In our careful review of Zolnowsky and Tanagawa, we find that both Zolnowsky and Tanagawa fail to teach the means or step of testing the operational validity of the target instruction and, if inoperable, prevent its execution. Zolnowsky does not teach a testing of the operational validity of the instruction before execution, but instead teaches that the instruction is to be executed first and appropriate steps taken if the instruction is not operable. We agree that Tanagawa teaches a protection circuit for preventing execution of a first type of instruction when the address code output from the program counter

does not designate any memory location in the first area for storing the first type of instruction. However, Tanagawa does not teach a testing of the operational validity of the instruction, but in fact teaches that the instruction is operable.

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The Examiner has failed to show that the prior art suggested the desirability of the Examiner's proposed modification. Tanagawa teaches that the need of the prevention circuit is not because of a presence of an inoperable instruction. Instead, Tanagawa teaches that the prevention circuit provides a measure for prevention of an erroneous operation of the computer when an instruction may be converted to another operable instruction due to undesirable environments. Tanagawa does not suggest to those skilled in the art to test the operational validity of the instruction before it is executed. We cannot find that Appellants' invention is obvious just because the Examiner puts together the Appellants' invention using the Appellants' application as a road map. This hindsight view is not evidence that those skilled in the art would have reason to make the modification. We are not inclined to dispense with proof by evidence when the proposition at issue is not supported by a teaching in a prior art reference or shown to be common knowledge of unquestionable demonstration. Our reviewing court requires this

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evidence in order to establish a *prima facie* case. *In re Knapp-Monarch Co.*, 296 F.2d 230, 232, 132 USPQ 6, 8 (CCPA 1961); *In re Cofer*, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966). Therefore, we find that the Examiner has failed to establish why one having ordinary skill in the art would have been led to the claimed invention by teachings or suggestions found in the prior art.

We have not sustained the rejection of claims 2 through 18 under 35 U.S.C. § 103. Accordingly, the Examiner's decision is reversed.

REVERSED

	ERROL A. KRASS)	
	Administrative Patent Judge)	
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)	BOARD OF
PATENT)	
	JERRY SMITH)	APPEALS AND
	Administrative Patent Judge)	
INTERFERENCES)	
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Administrative Patent Judge)

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